



24V BATTERY

# POWER WHEELBARROW

92453



These instructions accompanying the product are the original instructions. This document is part of the product, keep it for the life of the product passing it on to any subsequent holder of the product. Read all these instructions before assembling, operating or maintaining this product.

This manual has been compiled by Draper Tools describing the purpose for which the product has been designed, and contains all the necessary information to ensure its correct and safe use. By following all the general safety instructions contained in this manual, it will ensure both product and operator safety, together with longer life of the product itself.

All photographs and drawings in this manual are supplied by Draper Tools to help illustrate the operation of the product.

Whilst every effort has been made to ensure the accuracy of information contained in this manual, the Draper Tools policy of continuous improvement determines the right to make modifications without prior warning.

# 1. TITLE PAGE

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## 1.1 INTRODUCTION:

**USER MANUAL FOR: 24V BATTERY POWER WHEELBARROW**

**Stock No: 92453**

**Part No: PB120**

## 1.2 REVISION HISTORY:

**Date first published March 2020.**

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As our user manuals are continually updated, users should make sure that they use the very latest version.

**Downloads are available from:** <http://drapertools.com/manuals>

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## 1.3 UNDERSTANDING THIS MANUAL'S SAFETY CONTENT:

**WARNING!** – Information that draws attention to the risk of injury or death.

**CAUTION!** – Information that draws attention to the risk of damage to the product or surroundings.

## 1.4 COPYRIGHT © NOTICE:

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## 3. WARRANTY

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### 3.1 WARRANTY

Draper tools have been carefully tested and inspected before shipment and are guaranteed to be free from defective materials and workmanship.

Should the tool develop a fault, please return the complete tool to your nearest distributor or contact

**Draper Tools Limited, Chandler's Ford, Eastleigh, Hampshire, SO53 1YF. England.**

**Telephone Sales Desk: (023) 8049 4333 or Product Help Line (023) 8049 4344.**

A proof of purchase **must** be provided with the tool.

If upon inspection it is found that the fault occurring is due to defective materials or workmanship, repairs will be carried out free of charge. This warranty period covering parts & labour is 12 months from the date of purchase except where tools are hired out when the warranty period is 90 days from the date of purchase. This warranty does not apply to any consumable parts, any type of battery or normal wear and tear, nor does it cover any damage caused by misuse, careless or unsafe handling, alterations, accidents, or repairs attempted or made by any personnel other than the authorised Draper warranty repair agent.

**Note:** If the tool is found not to be within the terms of warranty, repairs and carriage charges will be quoted and made accordingly.

This warranty applies in lieu of any other warranty expressed or implied and variations of its terms are not authorised.

Your Draper warranty is not effective unless you can produce upon request a dated receipt or invoice to verify your proof of purchase within the warranty period.

Please note that this warranty is an additional benefit and does not affect your statutory rights.

**Draper Tools Limited.**

# 4. INTRODUCTION

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## 4.1 SCOPE

Self propelled, cordless wheelbarrow designed for use in the garden, allotment, stables or building site. When the battery runs low or is disconnected, it can still be used as a normal push wheelbarrow.

## 4.2 SPECIFICATION

Stock no. ....	92453
Part no. ....	PB120
Motor .....	250W
Battery voltage .....	24V (2 x 12V 12AH in series)
Battery capacity .....	12Ah
Bucket capacity .....	120kg
Max. speed .....	4.5km/h
Max. working angle with full 120kg load .....	12°
Front wheel diameter .....	400mm (rated 215kg max. loading)
Charger for battery .....	100~240V/50~60Hz 29V/2A DC
Dimensions .....	L1250 x W745 x H828-930 mm (adjustable handle height)

## 4.3 HANDLING AND STORAGE

- Care must be taken when handling this product.
  - Dropping this product could have an effect on its accuracy and could also result in personal injury. This product is not a toy and must be respected.
- Environmental conditions can have a detrimental effect on this product if neglected.
  - Exposure to damp air can gradually corrode components.
  - If the product is unprotected from dust and debris, components will become clogged.
  - If not cleaned and maintained correctly or regularly, the machine will not perform at its best.

# 5. HEALTH AND SAFETY INFORMATION

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## 5.1 GENERAL SAFETY INSTRUCTIONS FOR POWER TOOL USE

### Warning!

- Please read the following instructions carefully, failure to do so could lead to serious personal injury.
- When using electric tools, basic safety precautions, including the following, should always be followed to reduce the risk of fire, electric shock and personal injury.
- Read all these instructions before operating this product and save these instructions.

**Important:** Draper Tools Limited recommends that this machine should not be modified or used for any application other than that for which it was designed. If you are unsure of its relative applications do not hesitate to contact us in writing and we will advise you.

**Know your power tool:** Read and understand the owner's manual and labels affixed to the tool. Learn its application and limitations as well as the specific potential hazards peculiar to this tool.

**Keep work area clean:** Cluttered areas and benches invite accidents. Floors must not be slippery due to oil or sawdust.

**Avoid dangerous environments:** Do not use power tools in damp or wet locations, or expose them to rain. Keep work area well lit. Provide adequate space surrounding the work area. Do not use in environments with a potentially explosive atmosphere.

**Keep children away:** All visitors should be kept a safe distance from work area.

**Stored tools:** When not being used, all tools should be stored in a dry, locked cupboard and out of the reach of children.

**Wear proper clothing:** Do not wear loose clothing, neckties or jewellery (rings, wristwatches) to catch in moving parts. NONSLIP footwear is recommended. Wear protective hair covering to contain long hair. Roll long sleeves above the elbow.

**Use safety goggles (head protection):** Wear CE approved safety goggles at all times. Normal spectacles only have impact resistant lenses, they are NOT safety glasses. Also, use face or dust mask if application is dusty and ear protectors (plugs or muffs) during extended periods of operation.

**Noise levels:** Some types of machines may have high noise levels when working. In such cases ear protection must be worn.

**Vibration levels:** Hand held power tools produce different vibration levels. You should always refer to the specifications and relevant Health and Safety guide.

**Dust extraction:** If your tool is fitted with a dust extraction fitting, always ensure that it is connected and being used with a dust extractor. Vacuum cleaners can be used if suitable for the material being extracted.

**Protect yourself from electric shock:** When working with power tools, avoid contact with any earthed items (e.g. pipes, radiators, hobs and refrigerators, etc.). If you are using a power tool in extreme conditions (e.g. high humidity or generating metal dust), always use an RCD (residual current device) at the power socket.

**Stay alert:** Always watch what you are doing and use common sense. Do not operate a power tool when you are tired or under the influence of alcohol or drugs.

**When working out of doors:** Only use extension leads designed for that purpose.

**Access to mains socket:** If a stationary machine is fitted with a moulded plug and cable, the machine should not be positioned so that access to the mains socket is restricted.

**Disconnect power to the tool:** When not in use, before servicing and when changing accessories such as cutters, etc.

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**Avoid accidental starting:** Make sure the switch is in the OFF position before plugging the machine into the power supply.

**Never leave machine running unattended:** Turn power off. Do not leave machine until it comes to a complete stop.

**Do not abuse the cord:** Never carry the tool by the power cable or pull it from the socket. Keep the power cable away from heat, oil and sharp edges. If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid hazard.

**Never stand on tool:** Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted. Do not store materials above or near the tool, so that it is necessary to stand on the tool to reach them.

**Check damaged parts:** Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, free running of moving parts, breakage of parts, mounting and any other conditions that may affect its operation. A guard or other part that is damaged should be repaired properly or replaced by an authorized service centre unless otherwise indicated in this instruction manual. Have defective switches replaced by an authorized service facility. Do not use the tool if the switch does not turn it on and off.

**Keep guards in place:** And in working order.

**Maintain tools with care:** Keep tool clean for the best and safest performance. Follow instructions for lubricating and changing accessories. All extension cables must be checked at regular intervals and replaced if damaged. Always keep the hand grips on the tool clean, dry and free of oil and grease.

**Use recommended accessories:** Consult the owners manual for recommended accessories. Follow the instructions that accompany the accessories. The use of improper accessories may cause hazards.

**Remove adjusting keys and wrenches:** Form a habit of checking to see that keys and adjusting wrenches are removed from the tool before turning it on.

**Do not overreach:** Keep proper footing and balance at all times.

**Use right tool:** Do not force the tool or attachment to do a job for which it was not designed.

**Do Not Force Tool:** It will do the job better and safer at the rate for which it was designed.

**Have your tool repaired by a qualified person:** This electric tool is in accordance with the relevant safety requirements. Repairs should only be carried out by qualified persons using original spare parts, otherwise this may result in considerable danger to the user.

## **5.2 ADDITIONAL SAFETY INSTRUCTIONS FOR BATTERY POWERED WHEELBARROWS**

- Wear shoes with non-slip treads when using the wheelbarrow. If you have safety shoes, wear them. Do not use the wheelbarrow while barefoot or wearing open sandals.
- When the wheelbarrow is left unattended, apply the brake stopper to make sure the wheelbarrow stays in place.
- When the motor is overloaded, the current will be cut off until the thermal protection resets. When this happens, wait for a few minutes to allow the motor to cool before reuse.
- This product is intended for outside residential, commercial and industrial uses.

# 5. HEALTH AND SAFETY INFORMATION

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## 5.3 RESIDUAL RISK

### Warning!

- Although the safety instructions and operating manuals for our tools contain extensive instructions of safe working with power tools, every power tool involves a certain residual risk which can not be completely excluded by safety mechanisms. Power tools must therefore always be operated with caution!

## 5.4 SAFETY INSTRUCTIONS FOR MAINS POWERED BATTERY PACKS AND CHARGERS

### Chargers

- The charger is for indoor use only.
- Prior to plugging the charger in to the supply, check that the plug and the cable are in good repair. If either are damaged, have the defective item replaced immediately by a suitably qualified person. If the casing of the battery charger is damaged, it is good policy to have the charger checked over by a suitably qualified person.
- Only use a correctly rated mains outlet to provide power, do not plug into site generators, attach to engine generators or D.C. sources. Do not use a mains socket outlet that is not switched.
- Use the correct Draper charger in conjunction with its corresponding battery pack. Do not charge any other batteries with Draper chargers. Any other application is considered misuse. Do not attempt to charge battery packs that are too hot (over 30°C) or too cold (under 5°C), if these conditions apply set the battery pack aside to “normalise” before proceeding with the charging operation.
- Set up the charger and cable in a safe place where it won't be knocked, tripped over, stepped on, etc. and where it is well ventilated. Make sure the ventilation slots in the charger case are not obstructed, plug the charger into the socket outlet. Inspect the battery pack for damage, if it is undamaged, plug it into the charger, ensuring the correct orientation. (Most chargers and batteries have ‘keys’ etc, to make sure the battery pack is not inserted incorrectly, if you are having to ‘force’ the battery pack into the charger, the chances are you have it the wrong way round, check and try again). Switch the charger on and check that the correct indicators illuminate, allow the battery pack to charge (see the Preparing the Battery Charger instructions for your charger). Once charging is complete, switch the charger off, remove the battery pack and store in a dry place, repeat the procedure if you have more than one battery pack to charge.


**Caution:** When the battery charger has been continuously used, the battery charger will be hot. Once the charging has been completed, give 15 minutes rest until the next charge.

- If, when the charger was switched on, the correct indications did not occur, leave for two or three minutes to allow the charger to stabilise, if the correct indications occur, allow the charging cycle to proceed as normal. If no indication appears at all switch off, remove the battery pack, unplug the charger, check that the charger contacts and the battery contacts are clean and repeat the process, if there is still no indication, switch off, remove the battery pack, unplug the charger and check the fuse. If the fuse is blown, replace and repeat the process, if the fuse blows again, or if the fuse was intact, attempt no further action. Refer the charger to a suitably qualified person for repair.



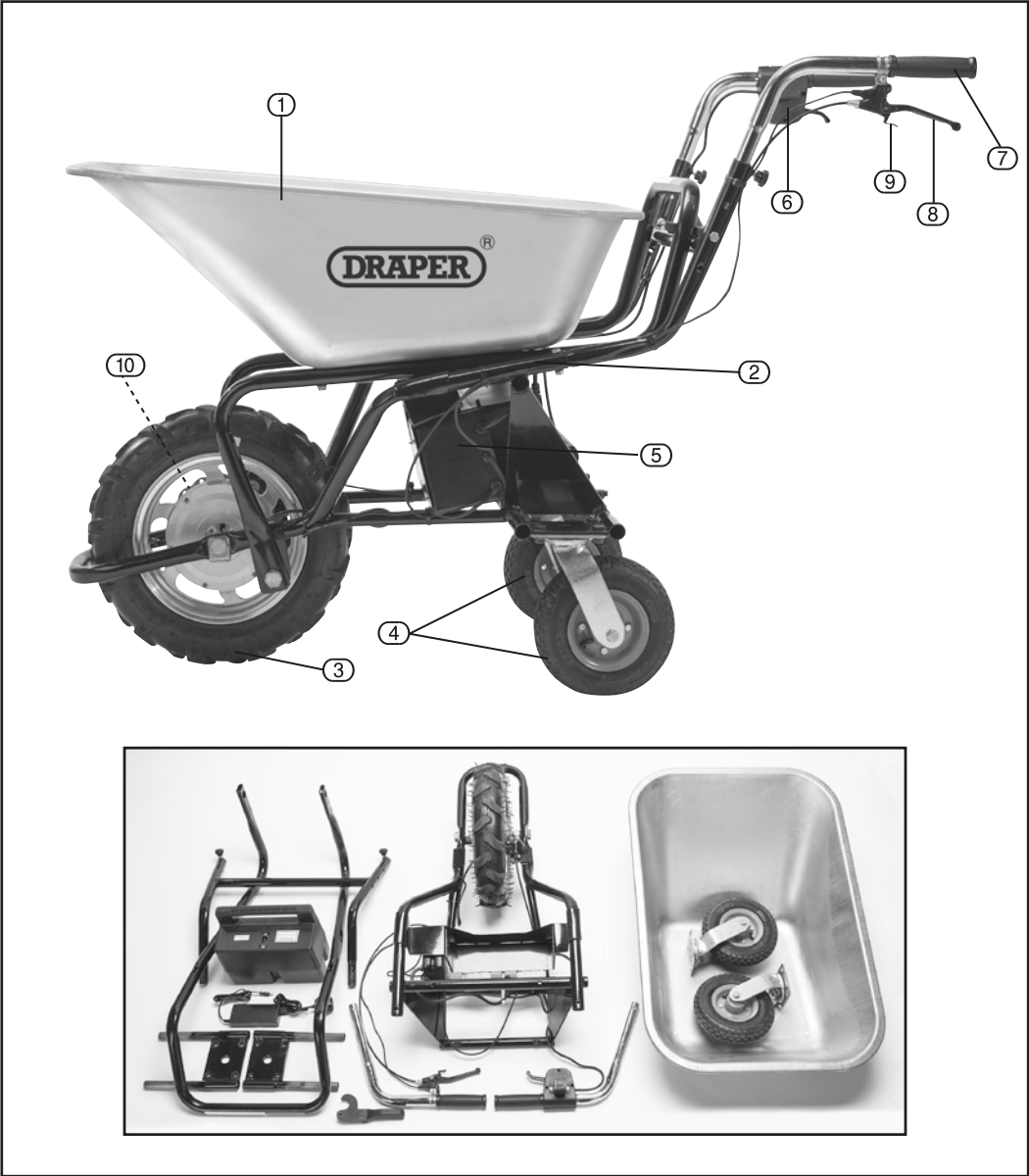
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## 5.5 CONNECTION TO THE POWER SUPPLY (CHARGER)

- Make sure the power supply information on the charger's rating plate is compatible with the power supply you intend to connect it to.
- The charger used by this product is designed for connection to a domestic power supply rated at 230V AC.
- If an extension lead is required, use an approved and compatible lead rated for this appliance. Follow the instructions supplied with the extension lead.
- If using an extension lead, follow the instructions that came with your lead regarding maximum load while the cable is wound. If in doubt, ensure that the entire cable is unwound. Using a coiled extension lead will generate heat, which could melt the lead and cause a fire.
- †Double insulated  : The charger used by this product requires no earth connection as supplementary insulation is applied to the basic insulation to protect against electric shock in the event of failure of the basic insulation.

# 6. TECHNICAL DESCRIPTION

## 6.1 IDENTIFICATION



- |                       |                    |                 |              |
|-----------------------|--------------------|-----------------|--------------|
| ① Bucket              | ④ Back wheels      | ⑦ Handle        | ⑩ Disc brake |
| ② Tilting bucket rack | ⑤ Battery          | ⑧ Brake lever   |              |
| ③ Front wheel         | ⑥ Speed controller | ⑨ Brake stopper |              |

# 7. UNPACKING AND CHECKING

## 7.1 PACKAGING

Carefully remove the product from the packaging and examine it for any sign of damage that may have happened during shipping. Lay the contents out and check them against the parts shown below. If any part is damaged or missing please contact the Draper help line (the telephone number appears on the Title page) and do not attempt to use the tool.

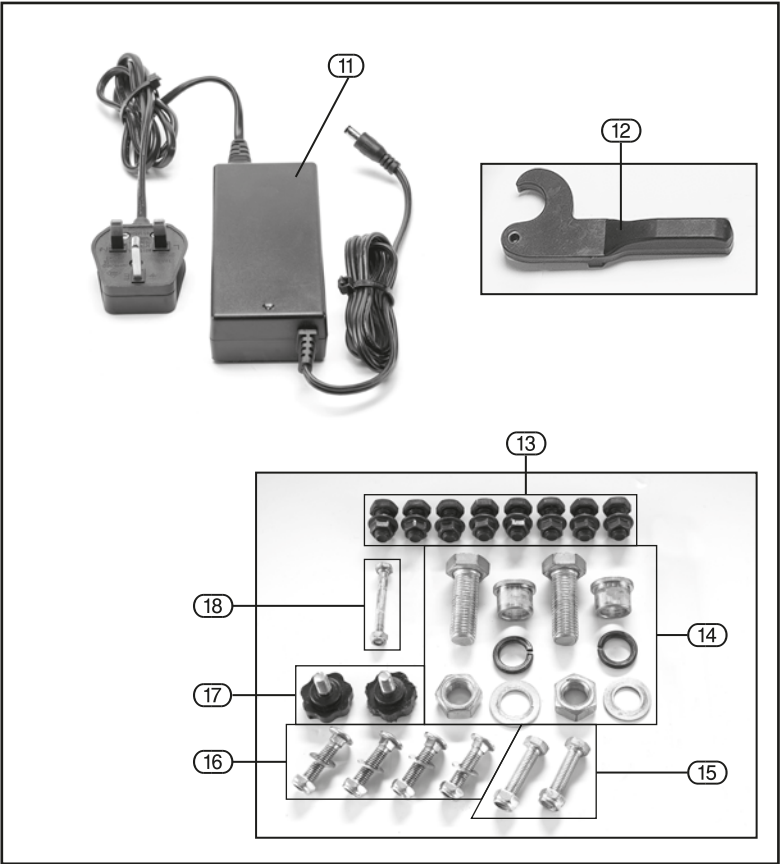
The packaging material should be retained at least during the warranty period in case the tool needs to be returned for repair.

### Warning!

- Some of the packaging materials used may be harmful to children. Do not leave any of these materials in the reach of children.
- If any of the packaging is to be thrown away, make sure they are disposed of correctly according to local regulations.

## 7.2 WHAT'S IN THE BOX?

As well as the motor wheelbarrow there are parts also included.



- (11) Charger
- (12) Tilt latch
- (13) Rear wheel fixings
- (14) Tipping pivot fixings
- (15) Tube frame fixings x 2
- (16) Bucket fixings
- (17) Wheel/handlebar fixings x 4
- (18) Tilt latch fixing

## 8. ASSEMBLY

### Warning!

- Failure to follow these instructions may lead to serious injury and could cause premature malfunction of the equipment, which is not covered by the warranty.

### 8.1 ASSEMBLING THE WHEELBARROW – FIGS. 1 – 9

Please charge the battery for at least 8 – 10 hours before using the wheelbarrow. Please refer to section 10 on page 16.

- Rest the base frame with handle on the ground and prepare the two back wheels (4), using the rear wheel fixings (13).
- Assemble the back wheels on the back subframe, by using the fixings to fix the tube onto the main frame.
- Fit the upper frame as per Fig. 3, using the tube frame fixings (15).
- Slide the wheeled subframes onto their mounting tubes (rubber mallet may be required), and lock into chosen width using the wheel fixings (17).
- To adjust the handle to the correct direction, use the handlebar fixings (17). The handle height can be adjusted accordingly.
- Take out the speed controller that has been pre-connected near the battery, then fasten it to the handle which hasn't got the brake on it.

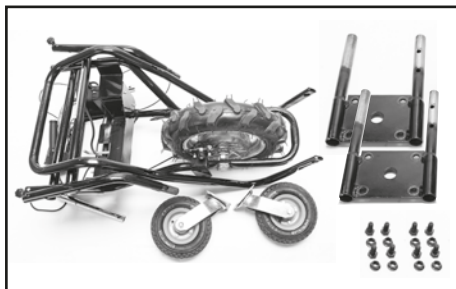


FIG.1

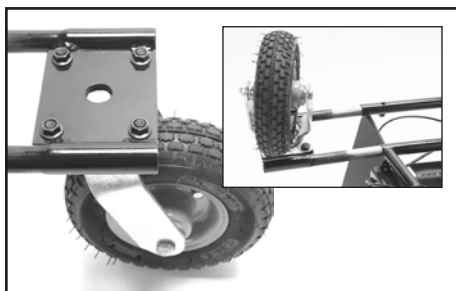


FIG.2



FIG.3



FIG.4

- Fix the speed cable accordingly.
- Get the bucket rack and two sets of screws, nuts and washers ready. Insert the bolt and washer into the rack.
- Obtain the bucket and four sets of screws, nuts and washers. Fasten the bucket to the bucket rack.
- **Caution!**
  - At this point, it is very important to make sure that the wires run down the tube and **DO NOT interfere** with the bucket or get between the tubes. Ensure wiring runs along left/outside of tube to avoid any interference with the wheelbarrow's tipping action.



FIG.5



FIG.6

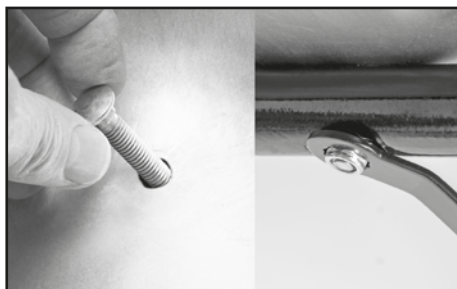


FIG.7



FIG.8

## 8. ASSEMBLY

- Fit the bucket frame safety latch using the tilt latch fixing (18).

### 8.2 INSTALLING THE BATTERY – FIGS. 10 – 12

- Depress the brake stopper (9) on Fig. 12 on the hand brake to stop the wheelbarrow without having to hold it. Stand at the side and lift the bucket up. To make access easier, make sure there is no-one in front of the wheelbarrow.
- Install the battery into the battery holder, remembering to secure it by rotating the stopper.
- Simply lift the brake slightly to de-activate the brake stopper.

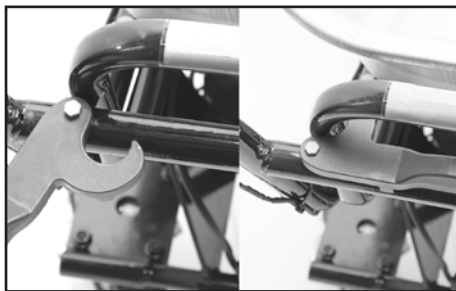


FIG.9



FIG.10

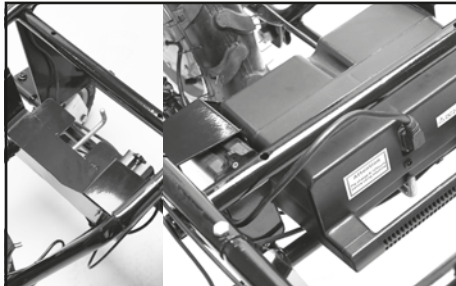


FIG.11



FIG.12

## 9. OPERATION AND USE

### 9.1 STARTING THE WHEELBARROW – FIGS. 13 – 14

- Switch on the power. A red LED light lights up and indicates that you are ready to go.
- Activate the speed control by lifting the trigger bar.
- The speed control is a variable type. This means that the higher you lift the bar, the faster it will travel.

#### – **Caution!**

- Remember to switch off the power after each use.



FIG.13

### 9.2 STOPPING THE WHEELBARROW – FIG. 15

- Simply lift the brake handle to brake the wheelbarrow. Please refer to the 'Installing the battery' section opposite on how to stop the wheelbarrow using the stopper when you are on a slope or any other situations where you need to stop the wheelbarrow and be away.

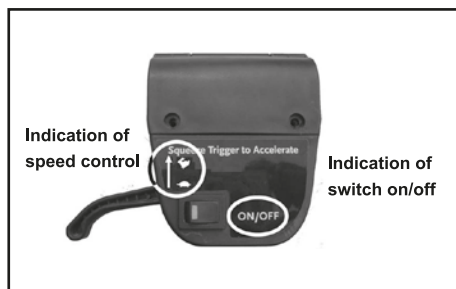


FIG.14

### 9.3 LIFTING THE TRAY

- Please refer to the 'Installing the battery' section opposite on how to lift the tray correctly when installing the battery or unloading the tray.



FIG.15

# 10. CHARGING THE BATTERY

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## 10.1 FIRST CHARGE

- The battery has been charged at the factory, however you will still need to recharge it fully before using the wheelbarrow for at least 8 – 10 hours.

## 10.2 CHARGING STEPS – FIG. 17

- Connect the charger to the battery.
- Plug the charger into the power source – a green LED will illuminate.
- When charging, the LED on the charger power unit will be red and once charging is complete, it will be green. The LED on the battery will illuminate white when the battery is receiving charge.
- Unplug the charger.
- Follow the above steps for every time you charge the battery. It should be fully recharged immediately after each use, in order to extend its life.
- If the wheelbarrow is to be stored for a duration, then remove the battery and store it upright in a safe and dry location, protected from frost. Be sure to recharge every 3 months when not used regularly.



FIG.16



# 11. MAINTAINING THE WHEELBARROW



## Warning!

- Battery **MUST BE REMOVED** before any maintenance is carried out.

### 11.1 WHEELS – FIG. 18

- To ensure the continued smooth operation of the wheelbarrow, it is recommended that the wheels are lubricated after every 100 hours of use.



FIG.17

### 11.2 BRAKES – FIG. 19

- If the brake is not working, adjust it in a counter clockwise direction. Then adjust the screw in a clockwise direction.
- Adjustment of the brake gap is needed when the brake force becomes weaker. To adjust the brake distance, loosen the internal hex screw (B), then turn the adjustment screw (E) in a clockwise direction. The distance between the disc and brake board should be 0.2mm and 0.5mm. Tighten the internal hex screw once the gap has been adjusted correctly.

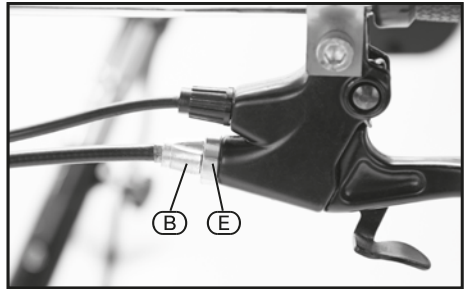


FIG.18

## 12. DISPOSAL

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### 12.1 DISPOSAL

- At the end of the machine's working life, or when it can no longer be repaired, ensure that it is disposed of according to national regulations.
- Contact your local authority for details of collection schemes in your area.

In all circumstances:

- Do not dispose of power tools with domestic waste.
- Do not incinerate.
- Do not abandon in the environment.
- Do not dispose of WEEE\* as unsorted municipal waste.



\* *Waste Electrical & Electronic Equipment.*

# 13. EXPLANATION OF SYMBOLS

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## 13.1 EXPLANATION OF SYMBOLS



Read the instruction manual.



Wear safety glasses.



Wear ear defenders.



Wear protective gloves.



Wear protective footwear.



Do not abandon into the environment.



Keep out of the reach of children.



**Warning!**



**WEEE**  
Do not dispose of Waste Electrical  
& Electronic Equipment in with  
domestic rubbish.

## CONTACT US

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**Service/Warranty Repair Agent:**

For aftersales servicing or warranty repairs, please contact the Draper Tools help line for details of an agent in your local area.

YOUR DRAPER STOCKIST

KCTL0320

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